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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,368	07/30/2003	Avelino Corma Canos	2429-1-022	8946

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EXAMINER

SAMPLE, DAVID R

ART UNIT PAPER NUMBER

1755

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/630,368

Applicant(s)

CANOS ET AL.

Examiner

David Sample

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1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☒ Claim(s) 1,2,6,7,10-12 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

Claim 14 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim must refer to any previous claims in the alternative only. See MPEP § 608.01(n).

Claims 1, 2, 6, 7, 10, 11, 12 and 14 are objected to because of the following informalities:

The claims employ 'preferable' recitations throughout. The phrases are not indefinite because one of ordinary skill in the art recognizes that the claims are not limited to the 'preferable' recitations, but encompass the broader recitations. However, U.S. patent practice typically prefers to include such 'preferable' recitations in dependent claims. Therefore, the examiner requests that the claims be amended to delete the 'preferable' recitations. The claims include the following 'preferable' recitations in the following instances:

In claim 1, the element having a +3 oxidation state;

the element having a +4 oxidation state;

In claim 2, the ranges for 'x' and 'y';

In claim 11, the heating temperature;

the tetravalent element Y (two occurrences);

the trivalent element X (two occurrences);

the inorganic cation;

the ranges for all of the reaction mixture ratios;

the organic cation 'R';

In claim 12, the 'other salt';

In claim 14, the characteristics of the added crystalline material; and  
the amount the seed are added.

Similarly, claim 11 employs the phrase 'such as for example,' which should be deleted and the recitations incorporated into a dependent claim.

The claims employ non-traditional Markush language of 'selected among.' The examiner requests that the claims be amended to use 'selected from the group consisting of ... and ...' or 'is ...or.' The claims employ such improper Markush language in the following instances:

In claim 6, the M cations;

In claim 7, the M cations;

In claim 11, the Y cations (two occurrences); and  
the X cations (two occurrences).

Claim 10 does not end in a period.

In claim 11, line 9, Ge is mistakenly written as Gei.

Appropriate correction is requested.

### ***Claim Rejections - 35 USC § 112***

Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 defines m, s, and vs in terms of "average relative intensity". The scope of this phrase is not understood by one of ordinary skill in the art. The term 'average' implies that a

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number of samples are x-rayed to determine an 'average relative intensity' but the claim fails to recite how many samples must be x-rayed to obtain an average. The examiner suggests deleting the word 'average' from the claim.

In claim 6, the ordinary skilled artisan does not know the phrase 'alkaline metals'.

Perhaps applicants are referring to alkali metals.

Claim 11 is indefinite as to the presence of the organic cation, 1-methyl-1,4-diazabicyclo[2,2,2]octane (methyl-DABCO). Initially, the claim specifically recites that the methyl-DABCO should be included in the reaction mixture (claim 11, line 12). Subsequently, the claim defines the reaction mixture ratio for ROH/SiO<sub>2</sub> in which 'R' is only 'preferably' methyl-DABCO (claim 11, lines 33-34). This latter recitation implies that the inclusion of methyl-DABCO is only optional.

Claims 2-5, 7-10, and 12-18 are rejected for failing to correct the deficiencies of the claims from which they depend.

#### ***Allowable Subject Matter***

Claims 1-18 are allowed subject to the correction of the above-noted objections and rejections under 112, second paragraph. The prior art fails to disclose or suggest a crystalline material having the recited x-ray diffraction pattern, a method of making such a material, or a method of using such a material.

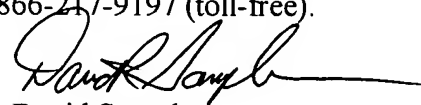
***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Sample whose telephone number is (571)272-1376. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (572)272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Sample  
Primary Examiner  
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